## Exhibit 46

**Excerpts of SW-SEC00254254** 

From: Day, Chris [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=AA9A0D2C87114C0898A128020A311291-DAY, CHRIS]

**Sent**: 11/18/2019 3:27:45 PM

To: Brown, Timothy [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=a1bcd95116e84d6692dd89f9d55c5b7a-Brown, Timo]

Subject: RE: https://jira.solarwinds.com/browse/BR-9800

HI Tim - We'll execute...but Tim O'Brien should be the one who signs off on this right? -- C

From: Brown, Timothy <timothy.brown@solarwinds.com>

Sent: Monday, November 18, 2019 10:19 AM

To: Rodushkin, Andrey <andrey.rodushkin@solarwinds.com>; Holmberg, Rick <rick.holmberg@solarwinds.com>

**Cc:** Day, Chris <chris.day@solarwinds.com>; Quilter, Alex <alex.quilter@solarwinds.com>; O'Shea, Sean <sean.oshea@solarwinds.com>; Quitugua, Eric <eric.quitugua@solarwinds.com>; Magnuson, Josh

<josh.magnuson@solarwinds.com>; Gracanin, Dzenana <dzenana.gracanin@solarwinds.com>; Kemmerer, Joel

<joel.kemmerer@solarwinds.com>; Smolsky, Sergey <Sergey.Smolsky@solarwinds.com>; Van Steenbergen, Rene

<rene.vansteenbergen@solarwinds.com>; Johnson, Rani <rani.johnson@solarwinds.com>; OBrien, Timothy

<timothy.obrien@solarwinds.com>

Subject: RE: https://jira.solarwinds.com/browse/BR-9800

RAF has been submitted by Rick and approved. Please move forward with the plan.

Tim



Office: 512.498.6549 | Mobile: 518.879.6169

From: Rodushkin, Andrey <andrey.rodushkin@solarwinds.com>

Sent: Monday, November 18, 2019 1:57 AM

To: Holmberg, Rick < <a href="mailto:rick.holmberg@solarwinds.com">rick.holmberg@solarwinds.com</a>; Brown, Timothy < <a href="mailto:timothy.brown@solarwinds.com">timothy.brown@solarwinds.com</a>>

Cc: Day, Chris <chris.day@solarwinds.com>; Quilter, Alex <alex.quilter@solarwinds.com>; O'Shea, Sean

<sean.oshea@solarwinds.com>; Quitugua, Eric <eric.quitugua@solarwinds.com>; Magnuson, Josh

<josh.magnuson@solarwinds.com>; Gracanin, Dzenana <dzenana.gracanin@solarwinds.com>; Kemmerer, Joel

<joel.kemmerer@solarwinds.com>; Smolsky, Sergey <Sergey.Smolsky@solarwinds.com>; Van Steenbergen, Rene

<rene.vansteenbergen@solarwinds.com>; Johnson, Rani <rani.johnson@solarwinds.com>; OBrien, Timothy

<timothy.obrien@solarwinds.com>

Subject: Re: https://jira.solarwinds.com/browse/BR-9800

Hi Rick,

Could you please confirm that DevOps can proceed with short-term solution and unblock BizApps?

Thanks in advance,

**Andrey** 

From: Brown, Timothy

Sent: Thursday, November 14, 2019 5:30 PM

To: Holmberg, Rick < rick.holmberg@solarwinds.com >

Cc: Day, Chris <<u>chris.day@solarwinds.com</u>>; Quilter, Alex <<u>alex.quilter@solarwinds.com</u>>; O'Shea, Sean <<u>sean.oshea@solarwinds.com</u>>; Rodushkin, Andrey <<u>andrey.rodushkin@solarwinds.com</u>>; Quitugua, Eric <<u>eric.quitugua@solarwinds.com</u>>; Magnuson, Josh <<u>josh.magnuson@solarwinds.com</u>>; Gracanin, Dzenana <<u>dzenana.gracanin@solarwinds.com</u>>; Kemmerer, Joel <<u>joel.kemmerer@solarwinds.com</u>>; Smolsky, Sergey <<u>Sergey Smolsky@solarwinds.com</u>>; Van Steenbergen, Rene <rene vansteenbergen@solarwinds.com>; Johnson

<<u>Sergey.Smolsky@solarwinds.com</u>>; Van Steenbergen, Rene <<u>rene.vansteenbergen@solarwinds.com</u>>; Johnson, Rani

<rani.johnson@solarwinds.com>; OBrien, Timothy <timothy.obrien@solarwinds.com>

Subject: Re: https://jira.solarwinds.com/browse/BR-9800

As with a number of the issues we deal with it looks like this is going to take some time to appropriately design and resolve. We have built our RAF Risk Acceptance Form model for these cases. We should not disrupt business, we should file a RAF accept risk for a period of time so that we can develop the correct approach. I'll synch with Rick tomorrow to understand the options and timeframe

Tim

## Tim Brown | VP Security

timothy.brown@solarWinds.com

Office: 512.498.6549 | Mobile: 518.879.6169

On Nov 14, 2019, at 3:40 PM, Holmberg, Rick < rick.holmberg@solarwinds.com > wrote:

This was a good summary.

We might have some other options as well that we should talk about.

I.e., Could we HA the database and set up the services to point to that one instead so we're not pointing to a true Production DB? There are only 2 services we use currently I believe. I have a meeting with Andrey tomorrow AM to do a bit of brainstorming on other options and other ways we might be able to mitigate this.

Rick

From: Day, Chris

Sent: Thursday, November 14, 2019 3:30 PM

To: Quilter, Alex <alex.quilter@solarwinds.com>; O'Shea, Sean <sean.oshea@solarwinds.com>;

Rodushkin, Andrey <a href="mailto:andrey.rodushkin@solarwinds.com">andrey.rodushkin@solarwinds.com</a>; Holmberg, Rick

<<u>rick.holmberg@solarwinds.com</u>>; Quitugua, Eric <<u>eric.quitugua@solarwinds.com</u>>; Magnuson, Josh

<josh.magnuson@solarwinds.com>; Gracanin, Dzenana <dzenana.gracanin@solarwinds.com>

**Cc:** Kemmerer, Joel < <u>joel.kemmerer@solarwinds.com</u>>; Smolsky, Sergey

<<u>Sergey.Smolsky@solarwinds.com</u>>; Van Steenbergen, Rene <<u>rene.vansteenbergen@solarwinds.com</u>>;

Johnson, Rani <rani.johnson@solarwinds.com>; Brown, Timothy <timothy.brown@solarwinds.com>;

OBrien, Timothy < timothy.obrien@solarwinds.com >

Subject: RE: https://jira.solarwinds.com/browse/BR-9800

Andrey's response was a good summary.

Just to add clarity – this is not a DevOps issue to resolve. We can easily setup the accounts with the requested access.

This is a separation of duties and a control issue that needs to be decided between Tim O, Rani, and Tim Brown.

It is clearly bad – violation of SOX controls and an ISO violation that we will need to register as there is no separate of duties and developers have full access to a billing environment (which we need to file regardless as it already exists).

And given past history with billing there is no way I am setting that up until Tim says "OK, I understand the risk, and I accept it".

But that is not my call – if Rani/Tim et all accept the risk we can turn it on.

--C

From: Quilter, Alex <alex.quilter@solarwinds.com>

Sent: Thursday, November 14, 2019 4:19 PM

To: O'Shea, Sean <sean.oshea@solarwinds.com>; Rodushkin, Andrey

<andrey.rodushkin@solarwinds.com>; Holmberg, Rick <<u>rick.holmberg@solarwinds.com</u>>; Quitugua, Eric <<u>eric.quitugua@solarwinds.com</u>>; Magnuson, Josh <<u>josh.magnuson@solarwinds.com</u>>; Gracanin, Dzenana <<u>dzenana.gracanin@solarwinds.com</u>>

**Cc:** Day, Chris <<u>chris.day@solarwinds.com</u>>; Kemmerer, Joel <<u>joel.kemmerer@solarwinds.com</u>>; Smolsky, Sergey <<u>Sergey.Smolsky@solarwinds.com</u>>; Van Steenbergen, Rene <<u>rene.vansteenbergen@solarwinds.com</u>>; Johnson, Rani <<u>rani.johnson@solarwinds.com</u>>; Brown,

Timothy <timothy.brown@solarwinds.com>; OBrien, Timothy <timothy.obrien@solarwinds.com>

Subject: Re: https://jira.solarwinds.com/browse/BR-9800

Thanks Sean, very helpful.

I am reading between the lines here, so please advise:

- Are we able to continue moving forward as-is while we resolve this issue on the Dev side?
- If so, how should we mitigate this risk/issue while we start the resolution project?

-ALX

From: "O'Shea, Sean" < sean.oshea@solarwinds.com>

Date: Thursday, November 14, 2019 at 4:14 PM

To: "Quilter, Alex" <alex.quilter@solarwinds.com>, "Rodushkin, Andrey"

<andrey.rodushkin@solarwinds.com>, "Holmberg, Rick" < rick.holmberg@solarwinds.com>,

"Quitugua, Eric" < eric.quitugua@solarwinds.com >, "Magnuson, Josh"

< josh.magnuson@solarwinds.com >, "Gracanin, Dzenana" < dzenana.gracanin@solarwinds.com >

Cc: "Day, Chris" <chris.day@solarwinds.com>, "Kemmerer, Joel"

<joel.kemmerer@solarwinds.com>, "Smolsky, Sergey" <<u>Sergey.Smolsky@solarwinds.com</u>>,

"Van Steenbergen, Rene" < rene.vansteenbergen@solarwinds.com >, "Johnson, Rani"

<rani.johnson@solarwinds.com>, "Brown, Timothy" <timothy.brown@solarwinds.com>,

"OBrien, Timothy" < <a href="mailto:timothy.obrien@solarwinds.com">timothy" < <a href="mailto:timothy.obrien@solarwinds.com">timothy" < <a href="mailto:timothy.obrien@solarwinds.com">timothy.obrien@solarwinds.com</a>>

Subject: RE: <a href="https://jira.solarwinds.com/browse/BR-9800">https://jira.solarwinds.com/browse/BR-9800</a>

<rene.vansteenbergen@solarwinds.com>, "Johnson, Rani" <rani.johnson@solarwinds.com>,
"Brown, Timothy" <timothy.brown@solarwinds.com>
Subject: RE: https://jira.solarwinds.com/browse/BR-9800

Thanks Eric! We're working on determining what options we have here and then I'll circle back with you and plan the best path forward. We're reinforcing with the team that we have to take special precautions and have standards we need to adhere to when working with production data in any environment.

Thx! Rick

From: Quitugua, Eric

Sent: Thursday, November 14, 2019 11:35 AM

To: Holmberg, Rick < rick.holmberg@solarwinds.com>; Magnuson, Josh

<josh.magnuson@solarwinds.com>; Gracanin, Dzenana <dzenana.gracanin@solarwinds.com>;

Rodushkin, Andrey <andrey.rodushkin@solarwinds.com>; O'Shea, Sean <sean.oshea@solarwinds.com> Cc: Day, Chris <chris.day@solarwinds.com>; Kemmerer, Joel <joel.kemmerer@solarwinds.com>;

Smolsky, Sergey <Sergey.Smolsky@solarwinds.com>; Quilter, Alex <alex.quilter@solarwinds.com>; Van

Steenbergen, Rene <rene.vansteenbergen@solarwinds.com>; Johnson, Rani

<rani.johnson@solarwinds.com>; Brown, Timothy <<u>timothy.brown@solarwinds.com</u>>

Subject: RE: https://jira.solarwinds.com/browse/BR-9800

Importance: High

Team,

I appreciate the discussion on how best to secure access to production data in order to improve our billing systems. However, the risk being brought up by the MSP DevOps team is valid. I can't stress enough that any request made to make production data available to test and development environments need to be vetted through the security team. Acceptance of this type of risk cannot be made by your teams.

We have experienced security incidents because of errors made when accessing production data and have also had to document compliance violations because of this poor security practice. Let's continue to work together to make sure this doesn't happen again. Please ensure that the security team is looped in before any decision is made for making this production data available.

If you have any questions, please don't hesitate to reach out to me or @Brown, Timothy

**Eric Quitugua** | Sr. Manager | **SolarWinds Information Security** eric.quitugua@solarwinds.com | 512-498-6200

From: O'Shea, Sean < sean.oshea@solarwinds.com >

Sent: Thursday, November 14, 2019 10:13 AM

**To:** Holmberg, Rick < <a href="mailto:rick.holmberg@solarwinds.com">rick.holmberg@solarwinds.com</a>; Day, Chris < <a href="mailto:chris.day@solarwinds.com">chris.day@solarwinds.com</a>; Magnuson, Josh < <a href="mailto:josh.magnuson@solarwinds.com">josh.magnuson@solarwinds.com</a>; Johnson, Rani < <a href="mailto:rani.johnson@solarwinds.com">rani.johnson@solarwinds.com</a>; Kemmerer, Joel < <a href="mailto:joel.kemmerer@solarwinds.com">joel.kemmerer@solarwinds.com</a>; Brown, Timothy < <a href="mailto:timothy.brown@solarwinds.com">timothy.brown@solarwinds.com</a>;

**Subject:** RE: <a href="https://jira.solarwinds.com/browse/BR-9800">https://jira.solarwinds.com/browse/BR-9800</a>

Hi Rick,

<andrey.rodushkin@solarwinds.com>, "Day, Chris" < <a href="mailto:chris.day@solarwinds.com">chris.day@solarwinds.com</a>, "O'Shea, Sean" < <a href="mailto:sean.oshea@solarwinds.com">sean.oshea@solarwinds.com</a>, "Lushchik, Igor" < <a href="mailto:igor.lushchik@solarwinds.com">igor.lushchik@solarwinds.com</a>, "Zanotto, Diego" < <a href="mailto:diego.zanotto@solarwinds.com">diego.zanotto@solarwinds.com</a>, "DeCapite, Duane" < <a href="mailto:duane.decapite@solarwinds.com">duane.decapite@solarwinds.com</a>, "Quilter, Alex" < <a href="mailto:alex.quilter@solarwinds.com">alex.quilter@solarwinds.com</a>> <a href="mailto:com">cc: "Van Steenbergen, Rene" < <a href="mailto:rene.vansteenbergen@solarwinds.com">rene.vansteenbergen@solarwinds.com</a>>, "Gracanin, Dzenana" < <a href="mailto:dzenana.gracanin@solarwinds.com">dzenana.gracanin@solarwinds.com</a>>

In the meantime, to not delay work, my understanding is that they are just looking at the data and read access was requested. Meaning there is no risk as to giving them access to continue current work until you are able to give us another environment with same data as prod.

Let me know! Thanks

<image004.png>

Dzenana Gracanin | Product Manager | SolarWinds

Subject: RE: https://jira.solarwinds.com/browse/BR-9800

Office: 512.682.9299 | Mobile: 773.414.4813

From: Smolsky, Sergey

Sent: Thursday, November 14, 2019 8:38 AM

To: Rodushkin, Andrey <andrey.rodushkin@solarwinds.com>; Day, Chris <a href="mailto:chris.day@solarwinds.com">chris.day@solarwinds.com</a>; O'Shea, Sean <a href="mailto:sean.oshea@solarwinds.com">sean.oshea@solarwinds.com</a>; Lushchik, Igor <a href="mailto:igor.lushchik@solarwinds.com">igor.lushchik@solarwinds.com</a>; Gracanin, Dzenana <a href="mailto:dzenana.gracanin@solarwinds.com">dzenana.gracanin@solarwinds.com</a>; Zanotto, Diego <a href="mailto:diego.zanotto@solarwinds.com">dzenana.gracanin@solarwinds.com</a>; Zanotto, Diego <a href="mailto:diego.zanotto@solarwinds.com">dzenana.gracanin@solarwinds.com</a>; Quilter, Alex <a href="mailto:alex.quilter@solarwinds.com">alex.quilter@solarwinds.com</a>>

Cc: Van Steenbergen, Rene < rene.vansteenbergen@solarwinds.com >

**Subject:** Re: <a href="https://jira.solarwinds.com/browse/BR-9800">https://jira.solarwinds.com/browse/BR-9800</a>

Just to be clear – this is **not** related to Backup Engineering (but to BizApps contractors).

The problem that Andrey has brought up (incomplete billing data in test environment) will require efforts from Backup Engineering/DevOps to obfuscate production data and have enough test data to avoid going to production. We need to plan these activities and prepare this environment.

## <image005.png>

Sergey Smolsky | Director of Engineering | SolarWinds Mobile: +375296235363

From: "Rodushkin, Andrey" <andrey.rodushkin@solarwinds.com>

Date: Thursday, November 14, 2019 at 4:52 PM

**To:** "Day, Chris" < <a href="mailto:com">chris.day@solarwinds.com">com</a>, "O'Shea, Sean" < <a href="mailto:sean.oshea@solarwinds.com">sean.oshea@solarwinds.com</a>, "Gracanin, Dzenana"

<dzenana.gracanin@solarwinds.com>, "Zanotto, Diego" <diego.zanotto@solarwinds.com>,

"DeCapite, Duane" <duane.decapite@solarwinds.com>, "Quilter, Alex"

<alex.quilter@solarwinds.com>

**Cc:** "Van Steenbergen, Rene" < <a href="mailto:rene.vansteenbergen@solarwinds.com">rene.vansteenbergen@solarwinds.com</a>>, "Smolsky, Sergey" < <a href="mailto:Sergey.Smolsky@solarwinds.com">Sergey.Smolsky@solarwinds.com</a>>

Subject: Re: https://jira.solarwinds.com/browse/BR-9800

Hi Crhis,

+@Gracanin, Dzenana, @Zanotto, Diego, @DeCapite, Duane, @Quilter, Alex

As far as I know it's not something new, we were developing billing using production services since the beginning as only production has data to test billing. And if you want to stop it, okay, but it affects a lot of stuff: billing platform development/support and new O365 billing as well.

Andrey

<image005.png>

Andrey Rodushkin | Senior Product Manager | SolarWinds Backup

Office: +31.885.222.219 | Mobile: +375.29.536.4363

From: "Day, Chris" < <a href="mailto:chris.day@solarwinds.com">chris.day@solarwinds.com</a>
Date: Thursday, November 14, 2019 at 4:48 PM

To: "O'Shea, Sean" < sean.oshea@solarwinds.com >, "Rodushkin, Andrey"

Cc: "Van Steenbergen, Rene" < rene.vansteenbergen@solarwinds.com >, "Smolsky, Sergey"

<Sergey.Smolsky@solarwinds.com>

Subject: RE: https://jira.solarwinds.com/browse/BR-9800

Hello – highlighted item needs to stop immediately. Under no circumstances is development to be done in production. If that impacts deliverables please let August know. That is a significant security and Sox violation.

As part of our ISO it also need to be filed as a non-conformity and reported.

+Rene and Sergey

--Chris

From: O'Shea, Sean < sean.oshea@solarwinds.com >

Sent: Thursday, November 14, 2019 8:33 AM

To: Rodushkin, Andrey <a href="mailto:andrey.rodushkin@solarwinds.com">andrey.rodushkin@solarwinds.com</a>; Lushchik, Igor

<igor.lushchik@solarwinds.com>

Cc: Day, Chris <chris.day@solarwinds.com>

Subject: https://jira.solarwinds.com/browse/BR-9800

Hi Andrey,

This request has brought to light three problems:

- They are currently using a shared login currently of a different SolarWinds employee. This is definitely a security incident and needs to stop.
  - Solution Granting the individual logins as requested.
- The developers are developing in Production as the staging/dev environments are not suitable.
  - o Solution Create a billing RC environment that is the same as production and then pulling access from all Developers.
- Because they are going to have Super User access and could potentially do actions that would have financial impact this should probably be under SOX control.
  - o Solution Speak to Danielle about this and decide.

I will catch up with Igor and Chris and we can process request tomorrow.

Cheers,

Sean

## <image005.png>

Sean O'Shea| Senior Manager, Operations Engineering | SolarWinds Mobile: +44 7510 710718